



FACT SHEET



BMDO FACT SHEET 204-00-11

Replaces Fact Sheet 204-00-03

THEATER HIGH ALTITUDE AREA DEFENSE SYSTEM

U.S. BMD STRATEGY & THAAD

Over the past several years, the U.S. has become increasingly concerned about the possible proliferation of theater ballistic missiles and weapons of mass destruction in many of the world's high-threat regions. Ballistic missile defense (BMD) is designed to counter this problem by: (1) providing a theater missile defense (TMD) for U.S. forces deployed abroad and (2) devaluing ballistic missiles as strategic assets, thereby dissuading countries that desire a missile capability for aggressive purposes.

The Theater High Altitude Area Defense (THAAD) system fits into this strategy as one of the Ballistic Missile Defense Organization's (BMDO) core BMD systems. The THAAD system represents a land-based upper tier TMD system, and will engage short, medium, and long range theater ballistic missiles.

The THAAD system's ability to intercept missiles at long range and high altitude (endo- and exo-atmospheric) will give U.S. forces the best chance to shoot down incoming missiles far enough out so that post-intercept debris will not harm our troops — a vital consideration if a missile carries a weapon of mass destruction.



THAAD SYSTEM OBJECTIVES

- Defeat tactical theater ballistic missiles
- Intercept missiles inside and outside the atmosphere
- Engage at long ranges and high altitudes
- Give U.S. and allied forces multiple opportunities to intercept incoming missiles

Furthermore, this ability will give U.S. Theater Ballistic Missile Defense (TBMD) forces the time to judge the success of an intercept attempt and, if necessary, launch more interceptors from THAAD or other missile defense systems. As the upper tier of a two-tiered TMD architecture, THAAD provides near leak proof protection when employed with PAC-3 or Navy Area Defense.

PROGRAM DEVELOPMENT AND SCHEDULE

THAAD is the most mature upper-tier system and is well along its development timetable. THAAD system development started in 1992 and is expected to be fielded in the 2007 timeframe. In the meantime, THAAD is undergoing rigorous testing and development.

Eleven Program Definition and Risk Reduction (PDRR) flight tests have been conducted to date; first flight occurred on April 21, 1995. All system segments have been integrated and a successful body-to-body intercept in the high endoatmosphere was achieved on June 10, 1999 during Flight Test 10. On August 2, 1999, a second intercept was achieved, this time against a separating target. The program is currently in Engineering and Manufacturing Development (EMD) following a June 2000 Milestone II decision. Flight testing will transition to the Kwajalein Missile Range in the 2006 timeline.

SYSTEM DESCRIPTION

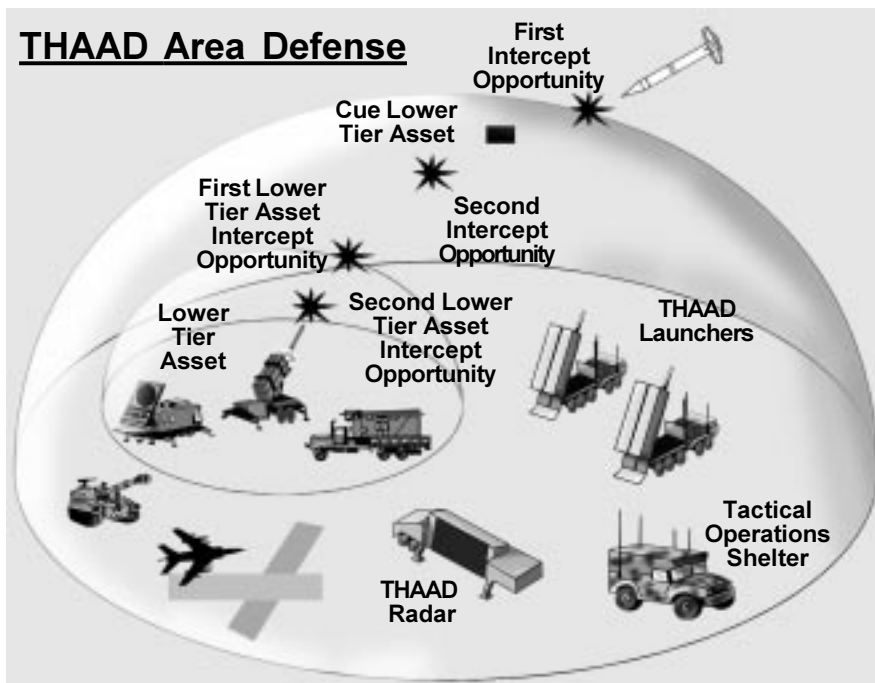
The THAAD system consists of four principal segments: truck-mounted launchers, interceptors, the THAAD Radar system, and the THAAD battle management/command, control, communications, and intelligence (BM/C3I) system.

The mobile launcher will protect and transport the interceptors, in addition to firing them. With its palletized load system, the launcher can be rapidly reloaded. Interceptors will consist of a single stage booster and a kinetic kill-vehicle that will destroy targets by colliding with them, called "hit-to-kill." The THAAD radar will support the full-range of surveillance, target tracking, and fire control functions, and provide a communications link with THAAD interceptors in-flight. Finally, THAAD's BM/C3I systems will manage and integrate all THAAD components by providing instructions, communications, and by processing sensor data. BM/C3I systems will also link the THAAD system to other missile and air defense systems, and to our maneuver forces to support a multi-tiered, highly effective, interoperable TMD architecture. All of these components are able to be transported by C-141 cargo aircraft.

ABM TREATY COMPLIANCE

The 1972 ABM Treaty between the former Soviet Union, now represented by Russia, and the U.S. limits the development of anti-ballistic missiles in order to preserve strategic deterrence. The U.S. has worked to ensure THAAD's compliance with the provisions of the ABM Treaty. The THAAD objective system configuration has been determined to be fully treaty compliant.

THAAD Area Defense



THAAD OBJECTIVE CHARACTERISTICS

Missile & Kill Vehicle

Weight: 600 kilograms
Length: 6.2 meters
Seeker: Infrared
Terminal Guidance

- Hit-to-Kill Precision
- Single stage rocket engine

Launcher

Height: 3.25 meters
Length: 12 meters
Weight: 40,000 kg loaded
Canister: 10 missile capacity

- Mounted on M1075 truck
- Rapid reload time

Radar

Array Size: 10 m²

- X-band frequency
- Surveillance, threat identification & classification
- Support to other BMD systems
- Attack assessment

BM/C3I

- Force interoperability
- Fire control

Ballistic Missile Defense Organization,
External Affairs
7100 Defense Pentagon
Washington, D.C. 20301-7100
(703) 697-8472